STATEMENT OF CONSIDERATIONS

REQUEST BY GENERAL ELECTRIC COMPANY FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-04NT42324; W(A)-04-066, CH-1244

The Petitioner, General Electric Company, Corporate Research and Development Center (GE), was awarded this cooperative agreement for the performance of work entitled, "Thermotunneling-Based Cooling Systems for High-Efficiency Buildings." In this program, GE will study and implement a novel approach to thermotunneling devices for high-efficiency, compact, and environmentally friendly cooling systems. GE will investigate multiple thermotunneling device architectures. Scalability of these devices and integration of the device into a module and a subsystem will be performed. The evaluation and optimization of subsystem performance will be completed.

The total estimated cost of the cooperative agreement is \$2,263,176. GE is cost sharing \$763,176 or 34%; DOE is providing the remaining \$1,500,000 (66%) toward this contract. The period of performance is from October 1, 2004 through September 30, 2007.

In its response to question 4 of the attached waiver petition, GE has described its technical competence in the field of electron tunneling and thermotunneling for cooling. GE has recently constructed mm² – sized prototypes based on advances in the formation of large uniform nanoscale gaps. GE Global Research has extensive resources in the area of thermal design, semiconductor device fabrication, and device-level and systems packaging. GE is further actively pursuing research regarding thermotunneling cooling and power generation devices. GE's response demonstrates its technical competency in the field of thermotunneling for cooling.

In its response to question 9 of the attached waiver petition, GE states that the waiver is not anticipated to have any substantial effect on competition or market concentration. The end products produced from technology developed under this cooperative agreement would be cast by many GE vendors who typically compete for this work. Thus grant of the waiver should have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein GE has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which GE agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, GE agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

Mulb. Owerch

Mark P. Dvorscak
Assistant Chief Counsel
Intellectual Property Law Division

Date: Open 16, 2005

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:

Michael McCabe

Office of the Building Technologies Program, Energy Efficiency

Date: Angust 1, 2005

and Renewable Energy, EE-2J

Paul A. Gottlieb

APPROVAL

Assistant General Counsel for Technology Transfer and Intellectual Property, GC-62

Date:

(t) U. S. COMPETITIVENESS The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.